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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

PFLUG

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on January 19, 2006

Signature \_\_\_\_\_

Typed or printed name HENRY M. FEIEREISEN

Application Number

09/754,618

Filed

01/04/2001

First Named Inventor

Rainer Pflug et al.

Art Unit

3683

Examiner

Sy, Mariano Ong

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- ☐ applicant/inventor.
- ☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒ attorney or agent of record. 31,084  
Registration number \_\_\_\_\_

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

Signature

HENRY M. FEIEREISEN

Typed or printed name

212-244 5500

Telephone number

January 19, 2006

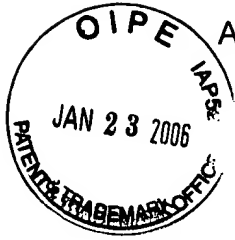
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☒ \*Total of 3 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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ARGUMENTS ACCOMPANYING THE PRE-APPEAL BRIEF REQUEST FOR  
REVIEW

The present invention, as set forth in independent claims 1 and 7 is directed to a thrust ball bearing and scroll compressor, respectively, whereby the bearing disks are made from a through-hardened ferrous material of martensitic structure across an entire cross section.

ISSUE 1:

Rejection of Claims 1 and 7 under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,921,684 (hereinafter "Niina") in view of Technical Book, Ball and Roller Bearings, Publisher John Wiley & Sons, Third Edition, pp 38-41 (hereinafter: "Technical Book").

CLEAR ERROR IN THE EXAMINER'S REJECTION: Lack of Motivation for making the modification in the rejection under 35 U.S.C. §103(a).

The Niina reference teaches a formula by which the surface of ball bearings and raceways of a thrust bearing in a scroll compressor can be hardened so as to withstand greater wear. Niina suggests this surface hardening to be done by carburizing. As is generally known to those skilled in the art, carburization involves the surface hardening of steel by converting the outer layer of low carbon steel to high carbon steel. Niina is thus concerned with surface hardening only.

To bridge the absence of this teaching, the Examiner applies Technical Book. The Technical Book publication discloses a method of through-hardening rolling bearing steels in the context of **roller-type** bearings. Nothing in this publication teaches or suggests a reference to make races of a **thrust ball** bearing or scroll compressor of through-hardened material. Please note that antifriction bearings are distinguished i.a. according to the shape of the rolling elements, namely between ball bearings and roller bearings. Technical Book relates to roller bearings and is silent as

far as ball bearings are concerned. Page 38 of the Technical Book, which bears the heading "Through hardening rolling bearing steels", refers clearly to roller bearings. Disks are not mentioned. Reference is also made in the 2d paragraph in the Technical Book on page 38 to "thrust needle rollers" only. Thrust ball bearing disks or scroll compressors are not addressed.

It is applicant's contention that a person skilled in the art would have no motivation or incentive to make the combination, as suggested by the Examiner, primarily because Niina is expressly involved with surface hardening only and Technical Book relates to roller bearings only.

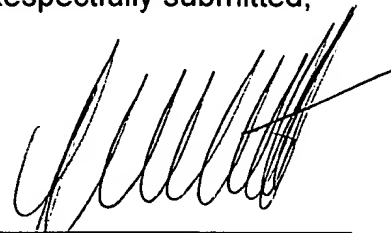
As stated by the Federal Circuit in *In re Rouffet*, 47 USPQ2d, 1453, 1457 "Most, if not all, inventions are combinations and mostly of old element. Therefore, an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be an illogical and inappropriate process by which to determine patentability."

Appellant further notes that this is the second appeal in the instant application and wishes to specifically refer to the decision by the Board of Patent Appeals and Interferences, as issued on December 30, 2004. Although the rejection of the independent claims, which were then on appeal, was affirmed, the Board expressly noted during the Oral Hearing and expressly emphasized in footnote 3 on page 4 of the decision that appellant's independent claims did, in fact, not require that the disks are made of through-hardened ferrous material but set forth that the disks are made from through-hardenable ferrous material. Appellant concedes that the then use of "through-hardenable", instead of "through-hardened", may not necessarily include a complete hardening across the entire cross section. However, claims 1 and 7 on appeal, now expressly set forth that the disks are through-hardened across an entire cross section.

For the reasons set forth above, it is respectfully requested to reverse the rejection of claims 1 and 7 and all claims dependent on claims 1 and 7, respectively, under 35 U.S.C. 103(a).

Respectfully submitted,

By:



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Henry M. Feiereisen  
Agent for appellant  
Reg. No. 31,084

Date: January 19, 2006  
350 Fifth Avenue, Suite 4714  
New York, N.Y. 10118  
(212) 244-5500  
HMF:UBD:af